

EXHIBIT 11

Color Vision Field Test



Purpose

Original Protocol (2019)

- Presentation of a single R, G, Y or W light for 3 seconds, with 5 seconds to verbally identify the color of the light.
- Prior to testing, the subject was shown two identical lights (not known to the subject) based on a randomized, pre-selected scoresheet.
- In **68 Color Vision Normals (CVNs)** of various ages:
 - **73.5% passed**
 - **26.5% failed** the test on first attempt
 - This was presumably due to the lack of familiarity with the colored lights.
 - Subjects often self-corrected during testing; all passed on second testing
 - An additional 22 subjects were then tested with all 4 lights presented prior testing, and all passed.

Modified Protocol (2020)

- Colors were specified (R, G, Y, W) before their initial presentation in a practice round.
- All four colors were presented prior to testing but not identified.
- Pass: 20 of 20 correct, or if only 1 error is made repeat test performed and observer must achieve 20 of 20 correct.

Methods / Procedures

Four randomized trial lights (R, G, Y, W) are presented prior to presentation of 20 signal lights

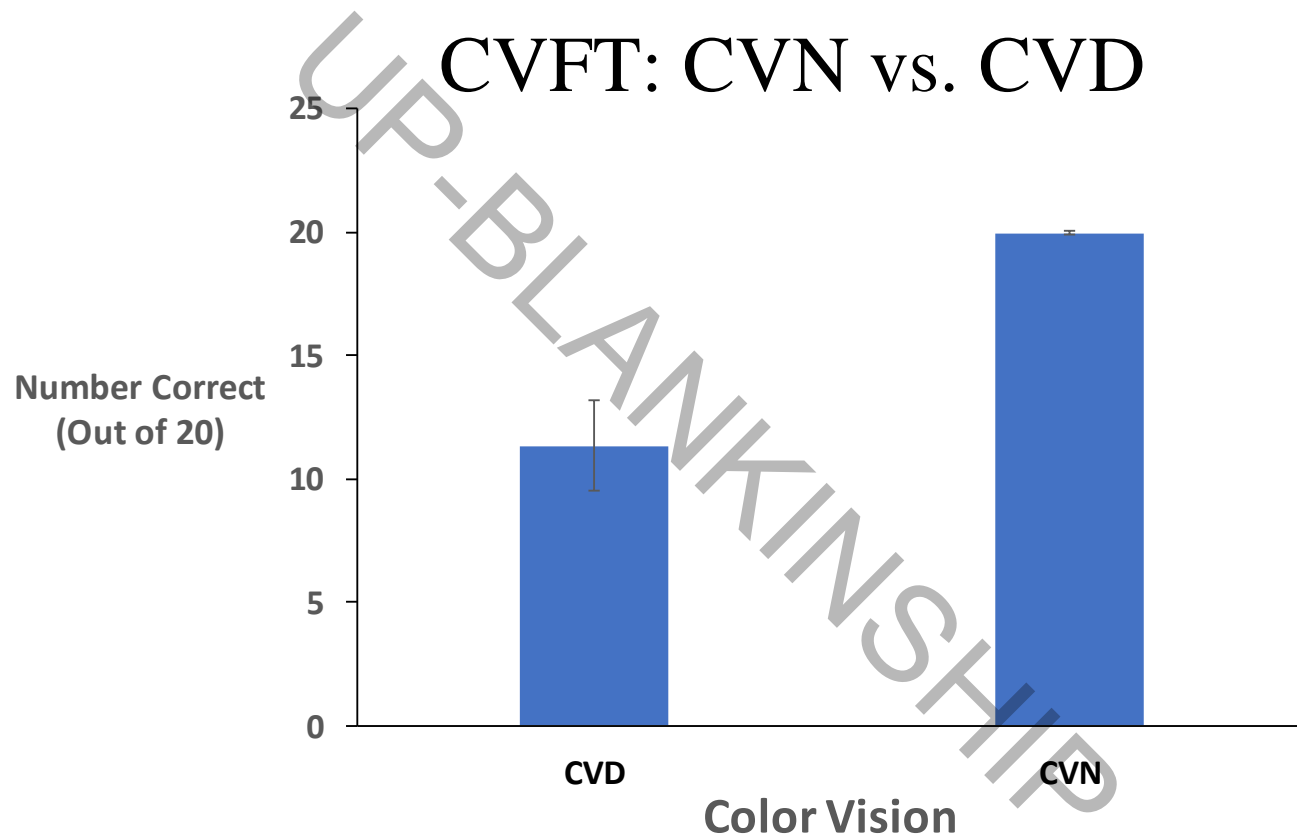
- **(53) total subjects tested on full protocol, including signal light test and comprehensive color vision assessment.**
 - (25) subjects with **normal color vision (CVN)** without underlying ocular conditions.
 - (25) subjects diagnosed with **hereditary color vision deficiency (CVD)**.
 - (3) subjects with underlying ocular/health conditions: excluded in statistical analysis
- Subjects' ages ranged from 17 - 58; there was no statistical difference in mean age between CVDs (mean age 30) and CVNs (mean age 26; $P > 0.1$).

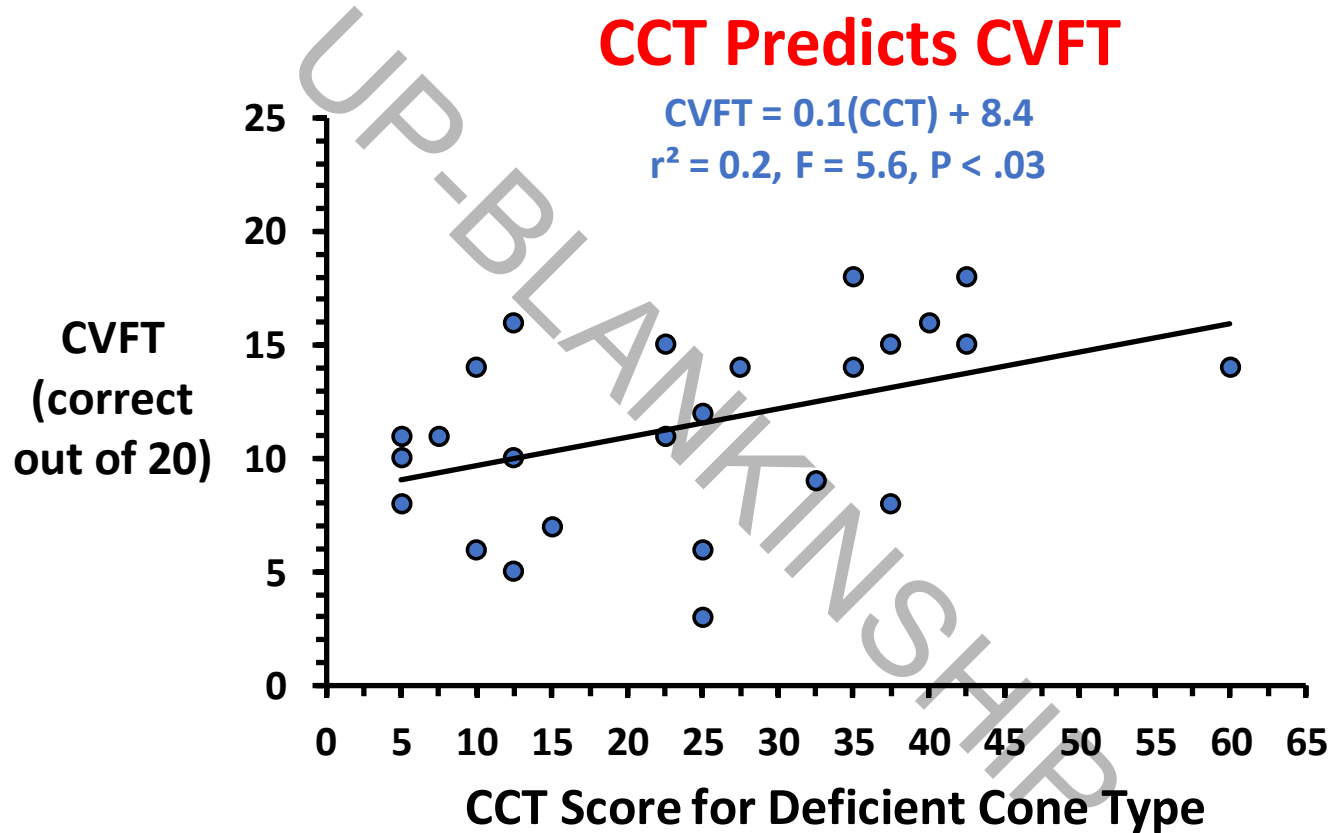
Results: CVN Results

- (25) CVN subjects were tested with the new protocol in which four randomized trial lights are presented prior to presentation of 20 signal lights.
- 24/25 identified all 20 lights correctly on the first test.
- 1/25 missed 1 light on the first test, but identified all 20 correct on the second test.
- **Therefore, the new protocol yields 100% specificity in CVNs.**

Results: CVD Results

- **25 CVD subjects, confirmed to be CVD on a battery of tests, ALL failed the signal light test on first attempt.**
- **The mean number correct out of 20 was 11.5 (standard deviation = 4.3).**
- **There was no significant relation between signal light score and age ($F = 0.07$, $P > 0.8$).**
- **There was no significant difference between signal light scores for deutan (green deficiency, $n = 18$) and protan (red deficiency, $n = 7$ $P > 0.8$).**





CVFT in Atypical Cases of CVD

- A 36 YO female with retinal cone pathology failed the CVFT as well as clinical test of color vision.
- An elderly male with glaucoma and diabetes passed the CVFT but did show decreased sensitivity on clinical tests.
- A female carrier of hereditary CVD showed mild loss of sensitivity on clinical testing but passed the CVFT.

Conclusions

- Specificity increased from 74% to 100% by modifying procedures (i.e., showing all 4 lights prior to testing).
- Sensitivity of the CVFT is 100% in hereditary color deficiency with no difference between red & green CVD.
- The efficacy of the CVFT is independent of age and correlates well with cone contrast scores, although currently we are analyzing this in greater detail.